

$^{13}\text{C}(\text{p},\text{d}) \quad \textbf{1974Pa01,1987Le24,1984Sm04}$

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu		NP A968, 71 (2017)	1-Jan-2017

- 1966Gl01: $^{13}\text{C}(\text{p},\text{d})$ E=8,12 MeV, measured $\sigma(E_d,\theta)$. ^{12}C deduced levels, L, reduced Γ .
- 1969Co06: $^{13}\text{C}(\text{p},\text{d})$ E=12,17 MeV, measured $\sigma(E,\theta)$.
- 1969Gu02: $^{13}\text{C}(\text{p},\text{d})$ E=7 MeV, measured $\sigma(E_d,\theta)$, P(θ). Deduced optical parameters.
- 1970Sc02: $^{13}\text{C}(\text{p},\text{d})$ E=50 MeV, measured $\sigma(E_d,\theta)$. Deduced optical model parameters. ^{12}C deduced levels, J, π , S.
- 1974Pa01: $^{13}\text{C}(\text{p},\text{d})$ E=62 MeV, measured $\sigma(E_d,\theta)$. ^{12}C deduced levels, L, S.
- 1977Gu14: $^{13}\text{C}(\text{p},\text{d})$ E=16.7,17.7 MeV, measured $\sigma(E_d,\theta)$.
- 1980Ba02: $^{13}\text{C}(\text{p},\text{d})$ E=800 MeV, measured $\sigma(\theta)$. DWBA analysis.
- 1980Ho18: $^{13}\text{C}(\text{pol. p},\text{d})$ E=65 MeV, measured $\sigma(\theta)$, analyzing power vs θ . ^{12}C levels deduced S. DWBA analyses.
- 1980Ka01: $^{13}\text{C}(\text{p},\text{d})$ E=200-500 MeV, measured $\sigma(E,\theta)$. Deduced dependence on momentum transfer.
- 1981Li06: $^{13}\text{C}(\text{pol. p},\text{d})$ E=200,400 MeV, measured $\sigma(\theta)$, analyzing power vs θ . Finite-range DWBA analysis.
- 1982Bu03: $^{13}\text{C}(\text{pol. p},\text{d})$ E=13.79-14.39 MeV, measured analyzing power vs E, θ . Deduced No definitive time-reversal invariance violation.
- 1983Kr02: $^{13}\text{C}(\text{pol. p},\text{d})$ E=123 MeV, measured $\sigma(\theta)$, A(θ). ^{12}C levels deduced S. DWBA analysis.
- 1984Oh06: $^{13}\text{C}(\text{pol. p},\text{d})$ E=500 MeV, measured $\sigma(\theta)$, analyzing power vs θ . ^{12}C level deduced spectroscopic factors. Exact finite-range DWBA analysis.
- 1984Sm04: $^{13}\text{C}(\text{p},\text{d})$ E=800 MeV, measured $\sigma(\theta)$, $\sigma(E_d)$. Deduced reaction mechanism. ^{12}C deduced high-spin state population enhancement. DWBA analysis.
- 1987Ca20: $^{13}\text{C}(\text{p},\text{d})$ E=41.3 MeV, measured $\sigma(\theta)$. ^{12}C level deduced polarization tensor. DWBA analysis.
- 1987Go27: $^{13}\text{C}(\text{p},\text{d})$ E=18.6 MeV, analyzed $\sigma(\theta)$. Deduced model parameters. ^{12}C levels deduced spectroscopic factors.
- 1987Le24: $^{13}\text{C}(\text{pol. p},\text{d})$ E=200 MeV, measured $\sigma(\theta)$, A(θ). ^{12}C levels deduced spectroscopic factors. Exact finite-range DWBA, coupled channels analysis.
- 1995To03: $^{13}\text{C}(\text{p},\text{d})$ E=35 MeV, measured $\sigma(\theta)$. ^{12}C levels deduced spectroscopic factors.
- 2004Li41: $^{13}\text{C}(\text{p},\text{d})$ E=35-65 MeV, analyzed $\sigma(\theta)$, spectroscopic factors.
- 2005De33: $^{13}\text{C}(\text{p},\text{d})$ E=7-60 MeV, calculated $\sigma(\theta)$, sigam. Deduced coupling effects.

 ^{12}C Levels

E(level)	Γ	L_n^{\dagger}	Comments
0			
4.4×10^3			
7.7×10^3			
9.6×10^3			
10.3×10^3			E(level): From (1987Le24).
12.7×10^3			
14.1×10^3			
15112 5	1		E(level): From (1974Pa01).
15.4×10^3			E(level): From (1987Le24).
16110 5	<20 keV	1	E(level), Γ : From (1974Pa01).
16.6×10^3			
17.76 $\times 10^3$ 2	80 keV	20	E(level), Γ : From (1974Pa01).
18.16 $\times 10^3$ 7	240 keV	50	Γ : From (1987Le24).
18.80 $\times 10^3$ 4	100 keV	22	E(level): From (1974Pa01).
			Γ : From $\Gamma=120$ keV 30 (1987Le24) and $\Gamma=80$ keV 30 (1974Pa01).
19.9×10^3	≈ 400 keV		E(level), Γ : From (1987Le24).
20.3×10^3	≈ 220 keV		E(level), Γ : From (1987Le24).
20.61 $\times 10^3$ 4	≈ 210 keV		E(level): From (1984Sm04).
			Γ : From (1987Le24).
21.5 $\times 10^3$ 2	<200 keV		E(level), Γ : From (1974Pa01).

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 $^{13}\text{C}(\text{p},\text{d})$ 1974Pa01, 1987Le24, 1984Sm04 (continued) ^{12}C Levels (continued)

E(level)	Γ	Comments
22.55×10^3 5	<200 keV	E(level), Γ : From (1974Pa01).
25.4×10^3 1	>0.5 MeV	E(level), Γ : From (1984Sm04).

[†] From (1974Pa01).